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# 中国棕榈科植物新资料

# NEW MATERIALS OF PALMAE FROM CHINA

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Key words Calamus; Plectocomia; Salacca; Wallichia; Calamus yunnanensis; C. wailong;

C. obovoideus; C. austro-guangxiensis.

关键词 省藤属;钩叶藤属;蛇皮果属;小堇棕属;云南省藤;大藤;倒卵果省藤;桂南省藤。

## 一、省藤属 Calamus Linn.

## 1. 直立省藤 新拟

云南 (Yunnan): 盈江 (Yingjiang) 那邦坝 (Nabangba), 陈三阳,陶国达等 (S. Y. Chen et G. D. Tao et al.) 18942。

等我国分布新记录;印度,孟加拉,缅甸有分布。

## 2. 滇缅省藤 新拟

Calamus erectus Roxb. var. birmanicus Becc. in Rec. Bot. Surv. Ind. 2:197. 1902 et in Ann. Roy. Bot. Gard. Calc. 11(1):126. t. 3. 1908.

云南 (Yunnan): 盈江(Yingjiag)那邦坝 (Nabangba),陶国达等(G. D. Tao)13412, 17878,裴盛基 (S. J. Pei) 14181; 孟连 (Menglian)、勐马 (Mengma),朱培智等 (P. Z. Zhu et al.) 10118,陶国达 9059。

我国分布新记录;缅甸有分布。

#### 3. 黑鳞秕藤 新变种

Calamus flagellum Griff. var. furvifurfuraceus S. J. Pei et S. Y. Chen, var. nov. A typo praecipue recedit segmentis frondis 2 vel 3 inferioribus superioribus sursum gradatim subaequaliter distantibus; petiolo rhachi et vagina cum spinis vaginarum dense nigro-brun-neo-furfuracea; fructu minore.

本变种与原种的主要区别在于叶下部的羽片 2—3 片成组着生,向顶部则渐为近等距;叶鞘及其上面的刺、叶柄、叶轴上均密被黑褐色鳞秕;果实比原种小。

Yunnan (云南): Mengla (勐腊) Mengdan (曼旦), 1984. 3. 30, S. Y. Chen et S. Q. Tong (陈三阳,童绍全) 18990 (typus, YNTBI) et 18991, S. Y. Chen et C. Yu (陈三阳,余彩)6471; Jiancheng (江城) Qushuiqu (曲水区), Y. Xu et Y. Z. Zhang (许勇,张耀增)14327.

#### 4. 勐腊鞭藤 新等级

Calamus karinensis (Becc.) S. J. Pei et S. Y. Chen, stat. nov.—C. flagellum Griff. var. karinensis Becc. in Ann. Roy. Bot. Gard. Calc. 11(1): 129. t. 6. 1908.

Species C. flagello Griff. affinis, sed vaginarum spinis conspicus seriatis; spiculis inflorescentiae pluribus et brevioribus; squamis fructuum marginibus non atrilinearibus, medio profunde canaliculatis; rhachi dorso non serie unguium solitaiorum, sed spinis reflexis basi brunneolis superne nigrescentibus, 2 vel 3 connatis praedita differt.

Yunnan (云南): Mengla (勐腊) Xiangming (象明), alt. 800—920m, 1979. 2.2 S. J. Pei et S. Y. Chen (裴盛基,陈三阳) 18857(fr. Typus, YNTBI), 18856; Exped. (考察队)32713; S. J. Pei 9025 (♂fl.), S. Y. Chen 18814.

我国分布新记录;原种模式产于缅甸。

本种与长鞭藤 C. flagellum Griff. 相近,但叶鞘上具更明显成列的刺;花序上的小穗更多和更短;果实鳞片边缘不具黑色线,中央具较深的沟槽;叶轴背面不具1列单生的爪,但具下弯的、基部淡褐色、上部黑色的2—3个合生的刺。

#### 5. 勐棒省藤 新拟

Calamus viminalis Willd. var. fasciculatus (Roxb.) Becc. in Hook. f. Fl. Brit. Ind. 6:444. 1892, Rec. Bot. Surv. Ind. 2:203. 1902 et in Ann. Roy. Bot. Gard. Calc. 11(1):206. 1908.——C. fasciculatus Roxb. Fl. Ind. 3:779. 1832; Griff. in For. Fl. Burma 2:517 1877.

云南 (Yunnan): 勐腊 (Mengla) 勐捧 (Mengpeng),栽培,裴盛基、陈渝 (S. J. Pei et Y. Chen) 18961, 陈三阳、童绍全 (S. Y. Chen et S. Q. Tong) 18994, 陈三阳、余彩 (S. Y. Chen et C. Yu) 18994-1,附近山上有野生分布;盈江 (Yingjiang),陶国达 (G. D. Tao) 17880。

我国分布新记录;缅甸,孟加拉的吉大港至印度的安达曼群岛有分布。

#### 6. 短穗省藤 新组合

Calamus faberi Becc. var. brevispicatus (Wei) S. J. Pei et S. Y. Chen, comb. nov.— C. tonkinensis Becc. var. brevispicatus Wei in Guihaia 6:31. 1986. South

China Inst. Bot. Exped. 03013.

根据所引标本,其羽片等距排列,上面 3 肋脉及下面中脉有刚毛以及果序和果实形态 均似 C. faberi Becc. 而不同于 C. tonkinensis Becc., 故应把该变种归入 C. faberi Becc. 之下。

广东 (Guangdong): 珠海 (Zhuhai) 大万山岛 (Dawanshandao), 1973. 11. 3, South China Inst. Bot. Exped. 03013 (typus, SCBI).

#### 7. 褐鳞省藤 新组合

Calamus balansaeanus Becc. var. castaneolepis (Wei) S. J. Pei et S. Y. Chen, comb. nov.— C. henryanus Becc. var. castaneolepis Wei in Guihaia 6:32.

本变种的营养体及花序形状均相似于 C. balansaeanus Becc.。我们检查了桂林附近产的一些标本的果序,发现这些标本的中性花的小窠均不具梗,所以不应归入 C. henryanus Becc. 之下。本变种与原种的主要区别在于:果实鳞片约 18 列(原种 21 列),边缘有 1 条向顶端渐宽的栗褐色的外缘线,叶片及羽片较小而相似于原种,但羽片上面具 3—5 条有刚毛的肋脉,通常靠两侧边缘的肋脉不明显,具稀疏刚毛,羽片下面的肋脉上具微刺,羽片近等距排列或 2—4 片成组排列,这些特征都说明本变种处于 C. henryanus Becc. 与 C. balansaeanus Becc. 之间的过渡类型,根据其中性花的小窠不具梗状的主要特征,故应重新组合为 C. balansaeanus Becc. 的变种为宜。

广西 (Guangxi):临桂 (Lingui),單灏富 (Qin Hao-fu) 70027;阳朔 (Yangshuo), 覃灏富 (Qin Hao-fu) 23;恭城 (Gongcheng),李荫昆(Li In-Kun) 402774;武鸣(Wu ming),黄启斌 (Huang Qi-bin) 604094;百色 (Bose),李治基 (Li Zhi-ji) 0022。

## 8. 云南省藤 新种 图 1:1-7

Calamus yunnanensis S. J. Pei et S. Y. Chen, sp. nov. —— C. acamhos pathus auct. non Griff.: Wei in Guihaia 6: 33. 1986. (陶国达 19992. 17905, s. coll. [viz. 杨增宏] 6868).

Species C. feani Becc. affinis, sed fructu squamis medio conspicue canaliculatis et longitudinaliter 15—18-seriatis (C. feanus Becc. 15) praedito; vaginarum spinis denseoribus inconspicue semiconicis; a C. acanthos patho Griff. praecipue recedit qui caule crassiore, prope stricto; vagina spinis tuberculiformibus breviter praedita; fronde magniore; fructus squamis apice leviter obtusis et ciliato-fimbriatis, margine ciliatis.

Caulis scandens, ultra 10 m longus, caulis cum vagina c. (1.5—)2—2.5 cm diam. vel crassior, exvaginatus 1—1.3 cm diam. Frondes pinnatisectae, c. 90 cm longae; rhachis apice non cirrhata, in quoque latere segmentis 6—8(—11) et inaequaliter distantibus disposita; segmentum elliptico-lanceolatum vel oblanceolatum, 30—35 cm longum, 4—4.5 cm latum, supra nervis validis 6—8 et spinulis ad nervos sparsis vel nullis ornatum, margine sparsim spinulosum, apice ciliatum, conspicue transversliter nervatum; petiolus 5—10 cm longus, utrinque spinis solitariis vel unguibus 2 vel 3 connatis stricte praeditus, margine sparsim unguiformi-spinosus; vagina dilute gibbo-convexa maculosis cinereo-brunneo-furfuraceis et spinis irregulariter inconspicue semiconicis leviter complanatis c. 1.5 cm longis inter spinas spinulis breviter ascendentibus praedita, juxta orem vaginatam spinis densioribus; ochreal brevissima subtiliter spinosa. Inflorescentia feminea et mascula homogenea, bis vel rare basi ter ramificans, 1.5—1.8 cm longa, apice cirrhata. Spatha primaria longe tubulosa vel subcylindrica unguibus solitaribus pauce praedita vel aceroso-

spinosa; spatha secundaria tubulari-infundibuliformis; spathilla asymmetrice infundibuliformis; involucrum masculum prope produnde cupulatum, a spathilla exsertum: flores masculus ovatus c. 4 mm longus, corollae lobo calyce dilute longiore; flos femineus (non apertus) ovatus, c. 5 mm longus; involucrophorum conspicue cupulatum vel prope discoideum extra orem spathillatum insertum; areola flores steriles prope lunata. Perianthium fructiferum pediculatum; fructus ellipticus vel subglobusus, 1.8 cm longus, 1.5—1.7 cm diam.; squamis longitudinaliter \15—18-seriatis, medio vadose canaliculatis, in sicco rubrobrunnels, margine eroso-luteolo-fasciariis; semina oblonga, complanta, 12—14 mm longa, 9—11 mm lata, 7 mm crassa, supra tuberculata; albuminibus ruminatis; embryones basilares.

Yunnan (云南); Jinghong(景洪), Menglong (勐龙), alt. 1750m, 1986. 2. 25, S. Y Chen et H. Han (陈三阳, 韩华)14325 (fr. typus, YNTBI), G. D. Tao (陶园达)19992, G. D. Tao et J. K. Tan (陶园达,谭家昆) 18962, S. Q. Tong et A. M. Li (童绍全,李安明) 32889, S. Y. Chen et S. Q. Tong (陈三阳,童绍全)619 (♂ allotypus, KUN), C. W. Wang 78353; Mengla (勐腊), Nangongshan (南贡山), G. D. Tao 18953, S. Y. Chen et S. Q. Tong 18986, 18987; Yingjiang (盈江), Tongbiguan (铜壁关), Z. H. Yang (杨增宏)6868, cult. (introd. from foreign.)

茎攀援,茎长 10m 以上;带叶鞘茎粗约(1.5一)2一2.5cm 或更粗,裸茎粗约 1—1.3cm。叶羽状全裂,长约 90cm;叶轴顶端不具纤鞭;羽片在叶轴每侧有 6—8(—11)片,不等距排列,椭圆状披针形或倒披针形,长 30—35cm,宽 4.5—5cm,上面有明显的叶脉 6—8条,具稀刺或无刺,边缘有稀疏微刺,顶端具纤毛状尖,横脉明显;叶柄长 5—10cm,两面具单生或 2—3 个合生的直刺或爪状刺,边缘具稀疏的爪状刺;叶鞘略具囊状凸起,被糠秕状灰褐色斑点,有排列不整齐的近半圆锥状的长约 1.5cm 的刺,间有短而向上的细刺,靠叶鞘口附近的刺较密集;托叶鞘很短,有细刺。 雌雄花序同型,二回或稀基部三回分枝,长约 1.5—1.8m,顶端具纤鞭;一级佛焰苞长管状至近圆筒形,具少数单生的爪或针刺; 二级佛焰苞管状漏斗形;小佛焰苞不对称漏斗形;雄花总苞近深杯状,伸出于小佛焰苞外;雄花卵形,长约 4mm,花冠裂片比花萼略长;雌花(未开放)卵形,长约 5mm; 总苞托<sup>10</sup>浅杯状或近盘状,着生于小佛焰苞口的外面;总苞杯状;中性花的小窠近新月形。果被梗状;果实椭圆形至近球形,长 1.8cm,直径 1.5—1.7cm,鳞片 15—18 纵列,中央具浅沟槽,干时红褐色,边缘具啮蚀状浅黄褐色带;种子长圆形,扁压,长 12—14mm,宽 9—11mm,厚 7mm,表面具瘤突,胚乳嚼烂状,胚基生。

本种与 C. feanus Becc. 相近, 但果实鳞片中央具明显的沟槽, 鳞片 15-18 纵列 (C. feanus Becc. 15 列),叶鞘上的刺密集,不呈明显的半圆锥状;而本种与 C. acanthospathus Griff. 的主要不同点在于;后者茎较粗,近直立;叶鞘上具瘤突状的短刺;叶片较大;果实鳞片顶尖稍钝且具纤毛状流苏,边缘具细纤毛。

#### 8a. 密花省藤 新变种

Calamus yunnanensis S. J. Pei et S. Y. Chen var. densiflorus S. J. Pei et

<sup>1)</sup> 总苞托一词是作者根据拉丁语 "involucrophorum" 意译的新视形态名词,专用于省藤属雌花的描述,它位于小佛焰苞内,成杯状或近盘状,套着或托着总苞(involucrum),放称之"总苞托"(见 Becc. in Ann. Roy. Bot. Gard. Calc. 11(1):23. 1908.)

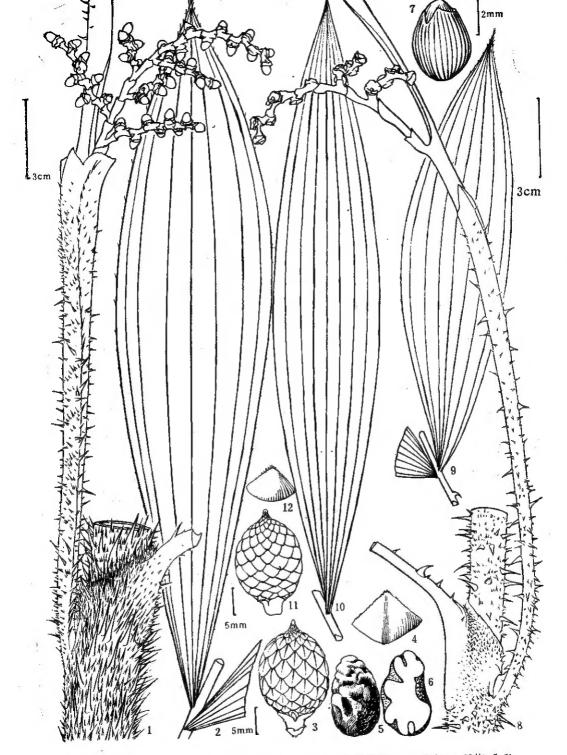


图 1 1-7 云南省藤 1.叶鞘及雌花序的基部; 2.叶片一段(示羽片); 3.果实; 4.鳞片; 5.种子; 6.种子纵剖面; 7.雄花。8-9.屏边省藤 8.叶鞘及雌花序基部; 9.叶片一段。 10-12. 墨脱省藤 10.羽片; 11.果实; 12.鳞片。(刘怡涛绘)

Fig.1 1—7. Calamus yunnanensis 1. leafsheath and lower portion of a female inflore-scence; 2. portion of a leaf (showing leaflets); 3. fruit; 4.scale; 5. seed; 6. seed in longitudinal section; 7. male flower. 8—9. C. yunnanensis var. intermedius 8. leaf-sheath and lower portion of a female inflorescence; 9. portion of a leaf. 10—12. C. feanus var. medogensis 10. a leaflet, 11. fruit, 12. scale.

S. Y. Chen, var. nov.

A typo imprimis recedit inflorescentia mascula robustiore, spatha primaria spinis unguliformibus dilute densibus et crassibus praedita, floribus spiculae mascule ovato, densiore, breviore, crassiore.

本变种与原种的主要区别在于: 雄花序较粗壮,一级佛焰苞上的爪状刺稍密而粗,小穗的雄花较密集、较短粗而呈卵形。

Yunnan (云南): Mengla (勐腊), Nangongshan, (南贡山), alt. 1800m, 1984.4.23, G. D. Tao et J. K. Tan (陶国达,谭家昆) 14291(♂ typus, YNTBI)。

8b. 屏边省藤 新变种 图 1:8-9

Calamus yunnanensis S. J. Pei et S. Y. Chen var. intermedius S. J. Pei et S. Y. Chen, var. nov.

Typo et C. feano Becc. similis, a typo imprimis recedit frondibus et inflorescentiis minoribus, vaginarum spinis conspicue semiconicis et basi tuberculatis; etiam a C. feano Becc. differt fructuum squamis medio vadoso canaliculatis.

本变种与原种和 C. feanus Becc. 相似,与原种主要区别在于叶和花序较小,叶鞘上 具明显的半圆锥状的刺且其基部具瘤突;与 C. feanus Becc. 区别在于果实鳞片中央具 浅沟槽。

Yunnan (云南): Pingbian(屏边)Maweichong (马尾冲),1954. 3. 31 Mao (毛品一) 03650 (typus, KUN).

9. 墨脱省藤 新变种 图 1:10-12

Calamus feanus Becc. var. mêdogensis S. J. Pei et S. Y. Chen, var. nov.

A typo imprimis recedit squamis fructuum multis longitudinaliter 17—18-seriatis; frondis segmentis margine apice et ad nervos fere haud spinulosis.

本变种与原种主要区别是果实鳞片 17—18 纵列,羽片上面的叶脉及边缘、顶端几无 微刺。

Xizang (西藏) Mêdog (墨脱), alt. 1850m 1974.9.12 Exped. Qinghai-Xizang(青藏队)74-4275 (typus, PE).

10. 弓弦藤 新变种

Calamus rhabdocladus Burret var. globulosus S. J. Pei et S. Y. Chen, var.

A typo imprimis recedit fructibus subglobosis, squamis fusco-brunneis.

本变种与原种的主要区别在于其果实为近球形,鳞片暗褐色。

Yunnan (云南): Mengla (勐腊) Bubeng (补蚌) 1965.5.25 S. Y. Chen et C. Yu (陈三阳,余彩)5541 (typus, YNTBI); YNTBI cult. introd. from Mengla, S. Y. Chen (陈三阳)8206.

## 11. 泽生藤 新拟

Calamus palustris Griff. in Calc. Journ. Nat. Hist. 5:61. 1844 et Palm. Brit. East Ind. 71. t. 199. 1850; Becc. in Ann. Roy. Bot. Gard. Calc. 11(1): 401.

t. 173. 1908.— C. latifolius Kurz (not of Roxb.) in Journ. As.Soc. Beng. 43(2): 210. t. 21A. 1874 et For. Fl. Brit. Burma 2:518 1877 (partly).

云南 (Yunnan): 勐腊 (Mengla), 陈三阳 18866, (云南热带植物所栽培,引自勐腊)。

我国分布新记录;缅甸丹老,印度安达曼与尼科巴群岛有分布。

#### 12. 长穗省藤 新变种

Calamus palustris Griff. var. longistachys S. J. Pei et S. Y. Chen, var. nov.

A typo imprimis recedit inflorescentia mascula c. 1.5 plo longiore, inflorescentia partiali longiore.

Yunnan (云南): Mengla (勐腊), YNTBI cult. introd. from Mengla (云南热带植物所栽培,引自勐腊), 1979. 10. 3., S. Y. Chen (陈三阳) 18865 (♂ fl. Typus, YNTBI).

#### 13. 滇越省藤 新拟

Calamus palustris Griff. var. cochinchinensis Becc. in Rec. Bot. Surv. Ind.: 2:211. 1902 et in Ann. Roy. Bot. Gard. Calc. 11(1): 405. t. 175. 1908; Conrard in Lecomte, Fl. Gen. Indo-chine 6:1036. 1937. ——C. latifolius auct. non Roxb.: Wei in Guihaia 6:36. 1986. (杨增宏 12001).

云南 (Yunnan): 勐腊 (Mengla) 尚勇 (Shangyong), 杨增宏 12001; 麻栗坡 (Malipo) 老居山保护区,陈三阳,童绍全 18974。

我国分布新记录;柬埔寨,越南有分布。

标本杨增宏 12001 与 C. latifolius Roxb. 不同之处在于: 雌花序显然较长,下部的 分枝花序也较长,小穗较多,总苞托(与原种相似)半伸出于各自的小佛焰苞(后者则被包进小佛焰苞内),总苞稍超出总苞托(后者套人总苞托内),故应归人本变种。

#### 14.大藤 新种 图 2

Calamus wailong\* S. J. Pei et S. Y. Chen, sp. nov.——C. platyacanthus auct. nons Warb. ex Becc.: Wei in Guihaia 6: 36. 1986. (杨增宏 12405).

Species C. palustris Griff. affinis, imprimis var. amplissimo Becc. similis, sed spinis vaginae subtiliter longioribus; inflorescentia feminea robustire et longiore; inflorescentiis partialibus et spiculis longioribus et pluribus; afuamis fsuctus 19—21-seriatis; segmentis saepe solitariis vel raro prope 2 aggregatis. C. platyacantho Warb. ex Becc. spina et forma vaginata imprimis similis, sed qui inflorescentia feminea breviore, frondis segmentis 2—4 aggregatis; perianthio fructifero conspicue pedicullato; fructo leviter magniore differt.

Caulis scandens, robustus; caulis cum vagina 4 cm diam., exvaginatus c. 2 cm diam. Frondes magnae, partibus segmentatis 1.5—2.5 m longis, apice cirrhatae 1.5—2.5 m longae; rhachis supra et juxta marginem dilute densa breviter stricto-spinosa, subtus in utroque margine sparsim stricto-unguiculato-spinosa, secus medium unguibus solitariis vel 2—3 aggregatis ornata, apice cirrho semiverticillatim unguilatiformi producta; segmenta magna inaequaliter distantia disposita, lanceolata, 50—55 cm longa, 5—7 cm lata, versus basi angustata, apice acumine setiforme ornata,

<sup>\* &</sup>quot;wailong" 为保语 (Dai language) 大藤 (big rattan) 之意。

5-7-nerve, non spinosa, margine spinulis densis dilute affixa; petiolus circumscriptione spinosus; vaginae gibbae spinis solitariis vel connatis, c. 5 cm longis, reflexis, inter spinas spinulis horizontalibus vel leviter ascendenter praeditae; ochrea brevissima. Inflorescentia mascula et faminea heterogenea, inflorescentia mascula ter ramificans, ultra 3 m longa; feminea brevior, bis ramificans, c. 1.5 m longa; spatha primaria longe tubularis vel cylindrica valide unguiculato-spinosa, apice putidolaciniata; spatha secundaria tubularis; spatha tertiaria breviter tubulariinfundibuliformis spinis unguiliformibus pauce ornata; spathilla mascula in prope bracteatoformem; involucrum semicupulatum intra spathillam 1/2 inclusum; flos masculus ovatus, 4 mm longus, calyce in dentes vadosos 3 divisus, corolla fere calyce 2 plo longiore; spathilla feminea asymmetrice infundibuliformis; involucrophorum vadose cupulate extra orem spathillaceam 1/2 productum, basi callosum; involucrum intra involucrophorum immersum, vadose cupulatum; areola floris sterilis lunata; flores femineae (non apertae), 3 mm longae, ovatae, calyce vadose lobato vel ad medio in dentes late trigonos apice obtusos dividens; perianthium fructu dilute pedicellatum. Fructus ovoidio-ellipsoideus vel ellipsoideus, omnino 17 mm longus, 11 mm diam., squamis longitudinaliter 19-21-seriatis, medio vadose canaliculatis, stramineis, dilute rubribrunneis intramarginaliter lineatis, prope apice gradatim latis, scariosis, subtiliter erosis ornatus; semina ovoidea 10-11 mm longa, 7-8 mm lata, leviter ruminatis; embryoes basilares.

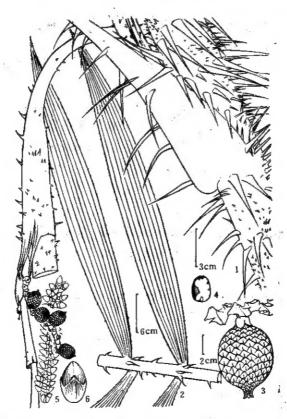


图 2 大藤 1·叶鞘及雌花序的基部(帶小果穗); 2·叶片一段; 3·果实(帶果穗轴); 4·种子纵 剖面; 5·雄花小穗; 6·雄花。(刘怡涛)

Fig. 2 Calamus wailong 1. leaf-sheath and lower portion of female inflorescence with a spikelet; 2. portion of a leaf; 3. a fruit with axis of spikelet; 4. seed in longitudinal section; 5. a male spikelet; 6. male flower.

Yunnan (云南): Mengla (勐腊), Yaoqu (瑶区), alt. 600—800m, 1974. 11. 20, Z. H. Yang (杨增宏) 12405 (typus, YNTBI); Xiangming (象明), alt. 840—950m, S. Q. Tong et A. M. Li (童绍全,李安明) 24898(♀ fl.), et 24893(♂ fl.); Mengla (勐腊) S. Y. Chen(陈三阳) 18868.

茎攀援,粗壮,带叶鞘茎粗 4cm,裸茎粗约 2cm。叶大,羽片部分长达 1.5—2.5m,顶端纤鞭长 1.5—2.5m;叶轴上面及近边缘处有稍密的短直刺,下面两侧边缘具稀疏的直刺或爪状刺,沿中央具单生或 2—3 个聚生的爪,顶端延伸为具半轮生的爪的纤鞭;羽片大,不等距排列,披针形,长 50—55cm,宽 5—7cm,向基部变狭,顶端具刚毛状尖,具 5—7条肋脉,无刺,边缘具紧贴稍密的微刺;叶柄周围具刺;叶鞘具囊状凸起,具单生或合生的长约5cm下弯的刺,间有水平或微向上的小刺;托叶鞘很短。雌雄花序异型,雄花序具三回分枝,长约 1.5m;一级佛焰苞长管状至近圆筒形,具粗状的爪刺,顶端干枯撕裂;二级佛焰苞管状;三级佛焰苞短管状漏斗形,具几个爪刺;雄小佛焰苞近苞片状,总苞半杯状,半包在小佛焰苞内;雄花卵形,长 4mm,花萼浅 3 齿裂,花冠几为花萼长的 2 倍;雌小佛焰苞为不对称漏斗形;总苞托浅杯状,伸出于小佛焰苞一半,基部具胼胝体;总苞浅杯状,套在总苞托内;中性花的小窠新月形;雌花(未开放)长 3mm,卵形,花萼浅裂或裂至中部,成 3 个宽三角形钝齿。果被稍梗状;果实卵状椭圆形至椭圆形,全长约 17mm,直径 11mm,鳞片19—21 纵列,中央有浅沟槽,草黄色,有淡红褐色的内缘线,近顶端处变宽,干膜质,细啮蚀状;种子卵形,长 10—11mm,宽 7—8mm,稍扁,背面有瘤突和深洼穴,胚乳稍嚼烂状,胚基生。

本种与 C. palustris Griff. 特别是与其变种 var. amplissimus Becc. 相似,但叶鞘上的刺较细长; 雌花序粗壮而长,分枝花序及小穗均更长且数量更多; 果实鳞片 19—21 列,羽片通常单生或偶有 2 片近生成组排列; 它与 C. plasyacanshus Warb.ex Becc. 相似,特别是叶鞘上的刺及形状相似,但后者雌花序较短,羽片 2—4 片成组着生,果被明显梗状,果实稍大。

#### 15. 上思省藤 新变种

Calamus distichus Ridl. var. shangsiensis S.J. Pei et S.Y. Chen, var. nov.

—— C. melanoloma auct. non Mart.: Wei in Guihaia 6:36. 1986. (W. T. Tsang 24174).

A typo imprimis recedit ramis inflorescentiae masculae brevioribus et dilute densioribus, spiculis pluribus et brevioribus.

本变种与原种的主要区别在于: 雄花序的分枝较短而稍密集,小穗稍多而短。

W. T. Tsang 24174 号标本与 C. melanoloma Mart. 不同之处在于: 果实鳞片无暗色边缘线, 胚侧生而与后者鳞片有暗色边缘线、胚基生而明显不同, 故应为新变种。

Guangxi (广西): Shangsi (上思),十万大山,1934.9.1, W. T. Tsang 24174 (fr. typus, SCBI), J. J. Wang (王鉴钧) 4868 (♂fl.)。

#### 16. 盈江省藤 新变种

Calamus nambariensis Becc. var. yingjiangensis S. J. Pei et S.Y. Chen, var.

Typo valde similis, sed segmentis basalibus apicalibusque unicis, ceterum binatim ad quaternatim dispositis et non subaequaliter distantibus differt.

本变种与原种很相似,不同之处在于,羽片在叶基部和顶端仅 1 片,其余为 2—4 片成组排列,而非近等距排列。

Yunnan (云南): Yingjiang (盈江) Tongbiguan (铜壁关), alt.1350—1450m, 1978. 12. 16, G. D. Tao (陶国达) 17907 (fr. typus, YNTBI), et 17914 (♂fl.) 13369, 13370, S. Y. Chen et G. D. Tao 18952。

#### 17. 高地省藝 新变种

Calamus nambariensis Becc. var. alpinus S. J. Pei et S.Y. Chen, var. nov. — C. khasianus auct. non Becc.: Wei in Guihaia 6:39. 1986 (裴盛基 14287)。

A typo imprimis recedit inflorescentia feminea breviore, spiculis dilute longioribus et floribus laxioribus; vaginarum spinis dilute angustioribus et densioribus, spinulis inter spinas grandes in horizontibus vel dilute ascendentibus; fronde segmentis 2—4 aggregatis.

本变种与原种主要区别在于雌花序较短,小穗略长,雌花较稀疏;叶鞘上的刺稍狭窄,稍密,大刺之间的小刺较长,呈水平或微向上;羽片 2—4 片成组排列。

Yunnan (云南): Mengla(勐腊)Nangongshan (南贡山), alt. 1400—1800m, 1982. 5.14, S. J. Pei (裴盛基) 14287 (fr. typus, YNTBI), S.Y. Chen et S.Q. Tong (陈三阳,童绍全)18985-1 (ơfl.) et 18985-2(♀fl.), G. D. Tao 18954; Jinghong (景洪) Menglong (勐龙) alt. 1550 m, S. Q. Tong et A. M. Li (童绍全,李安明) 32890; S. Y. Chen et S. Q. Tong 621; Luchun (绿春), 黄连山保护区, S. Y. Chen et S. Q. Tong 19000。

裴盛基 14287 号标本曾被鉴定为 C. khasianus Becc., 但据观察, 发现其叶鞘上的刺及果实鳞片列数(21列)等均更接近于 C.nambariensis Becc., 故定为本变种。

#### 18. 版纳省藤 新变种

Calamus nambariensis Becc. var. xishuangbannaensis S. J. Pei et S. Y. Chen, var. nov.

A typo recedit frondis segmentis saepe 2 aggregatis et non aequaliter distantibus. inflorescentia partiali feminea spiculis in quoque latere pluribus praedita, vaginae spinis dilute angustioribus et densioribus, spinulis inter spinas grandes longioribus.

本变种与原种不同之处在于羽片通常 2 片成组着生而非近等距排列,雌分枝花序每侧小穗较多,叶鞘上的刺稍狭窄而密,大刺之间的小刺较长。

Yunnan (云南): Jinghong (景洪) Menglong (勐龙), alt. 1550m, 1986.2.25, S. Y.Chen et H. Han (陈三阳,韩华)14324 (typus, YNTBI)。

#### 19. 勐龙省藤 新变种

Calamus nambariensis Becc. var. menglongensis S.J.Pei et S. Y. Chen, var. nov.

A typo recedit spinis vaginarum pluribus et densioribus, ascendentibus vel partim horizontalibus, juxta axillam elongatis, spinulis inter spinas grandes longioribus irregulariter seriatis; a typo et ceteris varietatibus differt fructibus et squamis minoribus.

本变种与原种不同之处,在于叶鞘上的刺较多而密,向上或部分呈水平状,靠近叶腋部的刺更细长,大刺之间的小刺较长,不象原种那样整齐成列;果实与鳞片均比原种和其它变种要小。

Yunnan (云南): Jinghong (景洪) Menglong(勐龙),1978. 10. 12,G.D.Tao 19991 (typus, YNTBI); S. Y. Chen et S. Q. Tong 622。

#### 20. 鳞秕省藤 新变种

Calamus nambariensis Becc. var. furfuraceus S. J. Pei et S. Y. Chen, var. nov.—C. khasianus auct. non Becc.: Wei in Guihaia 6:39.1986. (陶国达 17906)。

A typo imprimis recedit vagina et eius spinis grandibus parvique margine imprimis dorso dense rubro-brunneo-furfuraceis, spinulis vaginarum conformibus horizontalibus et dilute reflexis, frondis segmentis binatim ad quaternatim dispositis.

本变种与原种的主要区别在于叶鞘上的大小刺的边缘。尤其是刺的下面及叶鞘上被满红褐色鳞秕,叶鞘上的同形小刺呈水平或微下弯以及羽片2—4片成组排列。

Yunnan (云南): Yingjiang(盈江) Tongbiguan (铜壁关), alt. 1360m,1978. 12.16, G. D. Tao (陶园达)17906 (typus,YNTBI)。

# 21. 倒卵果省藤 新种 图 3

Calamus obovoideus S. J. Pei et S. Y. Chen, sp. nov.

Species C. nambariensis Becc. affinis, imprimis en var. alpino S. J. Pei et S. Y. Chen similis, sed gibba vaginata et rhache subtus non spinosa; fronde segmentis 2 saepe aggregatis, fructu obovoideo differt.

Caulis scandens; caulis cum vagina, c. 3 cm diam., exvaginatus c. 1.3—1.5 cm Pars segmentata frondis c. 2 m longa, apice cirrhis c. 1.4 m longis; rhachis supra margine spinis breve sparse solitariis, subtus unguibus sparse reflexe solitariis, apice 2 vel 3 connatis vel semiverticilatis praedita; segmenta 2 saepe aggregata, basi et apice solitaria, lanceolata, 30-35 cm longa, 4.5-6.5 cm lata, medio latiores fere utroque angustata, apice in acumen leviter setiformem abrupte instructa; 5- nervia, utrinque non spinosa, margine sparsim spinulosa; petiolus brevis, c. 10 cm longus, subtus non spinosus, supra margine spinis strictis sparsim ornatus; vagina praeter gibbam non spinosam spinis 1-2.5 cm longis, basi transversaliter unistrialatis, inter spinam magnam spinis spargenter horizonataliter vel leviter asendentibus breviter praedita; ochrea brevissima, Flores masculi ignoti. Inflorescentia feminea bis ramificans, c. 50 cm longa, 4-5-ramificans, c. 30 cm longa; spatha primaria, margine spargenter unguiculata, apice limbis laciniatis putride ornata; spatha secundaria longe tubuloso-infundibuliformis, juxta orem spathiformem aculeatis brevibu pauce praedita; spathilla asymmetrico-infundibuliformis; involucrophorum extra spathillaceam productum, semicupularis; involucrum profunde cupulatum, Perianthium fructiferum pedicullaforme, c. 4 mm longum, vodose 3obtuse 3-denticulatum. rotundato-denticulatum. Fructus obovoideus, c. 3.4 cm longus (pedunculatus et rostratus), latiorissimus 2.2 cm diam., in vivo. luteo-albus, in sicco luteolus vel stramineus; squamis longitudinaliter 21-seriatis, medio leviter late canaliculatis, margine subtiliter brunneo-lineatis, apice gradatim latis, leviter erossis; seminea oblongo-ovoidea, c. 2.2 cm longa, 1.4 cm lata, supra arcolata; albuminibus ruminatis; embryoes basilares.

Yunnan (云南): Jinghong (景洪), Menglong (勐龙), alt. 1600 m, 1987.11.21, S. Y. Chen et S. Q. Tong (陈三阳,童绍全) 620 (typus, KUN)<sub>o</sub>

茎攀援,带叶鞘茎粗 3cm,裸茎粗约 1.3—1.5cm。叶的羽片部分长约 2m,顶端纤鞭长约 1.4m;叶轴上面及边缘有稀疏单生的短刺,下面具稀疏单生下弯的刺至 2—3 个合生或半轮生的爪;羽片通常 2 片成组着生,基部和顶端均为单生,披针形,长 30—35cm,宽 4.5—6.5cm,中部较宽,几乎均匀地向两端变狭,顶端突然收缩成稍具刚毛的尖,5 条肋脉,两面无刺,边缘有稀疏微刺;叶柄短,长约 10cm,下面无刺,上面边缘有稀疏直立短刺;叶鞘的囊状凸起部分无刺,其余部分具 1—2.5cm 长的刺,刺基部有一细横纹线,大刺之间有散生的水平或微向上的短刺;托叶鞘很短。雄花序未见。雌花序二回分枝,长约 50cm,有4—5 个分枝花序,长 30cm;一级佛焰苞边缘有零星爪状刺,顶端为干枯撕裂状;二级佛焰苞长管状漏斗形,开口附近偶有几个短皮刺;小佛焰苞为不对称漏斗形;总苞托伸出于小佛焰苞外,半杯状;总苞深杯状,具 3 钝齿。果被梗状,长约 4mm,具 3 浅裂的钝圆齿;果实倒卵形,全长约 3.4cm (连梗及喙),直径最宽处 2.2cm,新鲜时黄白色,干时淡黄色或草黄色,鳞片 21 纵列,中央有稍宽的沟槽,边缘具细的褐色线。顶端变宽,稍啮蚀状;种子长圆状卵形,长 2.2cm,宽 1.4cm,表面具洼穴,胚乳嚼烂状,胚基生。

本种与 C. nambariensis Becc. 近缘,特别与它的变种高地省藤 var. alpinus S. J. Pei et S. Y. Chen 相似,但叶鞘上的囊状凸起处及叶轴下面无刺; 羽片通常 2 片成组着生于叶轴两侧;果实倒卵形而不同。

## 22. 中穗省藤 新变种

Calamus platyacanthus Warb. ex Becc. var. mediostachys S. J. Pei et S.Y. Chen, var. nov.

A typo recedit inflorescentia feminea 1 plo longiore, inflorescentiis partialibus longioribus, spiculis pluribus, fructu dilute minore, ovoideo, omnino c. 17mm longo, 10 mm diam., squamis dilute pluribus (1—2-seriatis). Etiam C. wailong S. J. Pei et S. Y. Chen similis, sed inflorescentia femine breviore et parviore.

本变种与原种不同之处在于雌花序长约 1 倍,分枝花序也较长,小穗较多,果实稍小, 卵形(全长约 17mm,直径约 10mm),鳞片稍多(多1-2 列)。雌花序也与大藤相似,但要短、小些。

. Yunnan (云南): Mengla (勐腊), Yaoqu (瑶区), alt. 700-800m, 1974.11.23, Z. H. Yang (杨增宏) 12476 (typus, YNTBI)。

#### 23. 粗壮省藤 新变种

C. platyacanthus auct. non Becc.: Wei in Guihaia 6:36.1986,p.p.(杨增宏 12406)。

A typo recedit vaginae gibba non spinescenti; fructu minore, perianthio fructifero breviore, subcylindrico, squamis 18-seriatis.

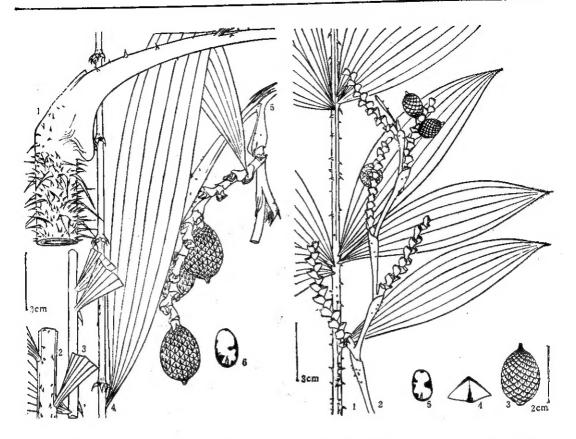


Fig.3 Calamus obvoidans 1. leaf-sheath and petiole; 2. lower portion of a leaf; 3.middle portion of a leaf; 4. terminal portion of a leaf; 5. portion of an inflorescence, showing spikelet and fruits; 6. seed in longitudinal section.

图 4 桂南省藤 1.叶下部; 2.果序一部分; 3.果实; 4.鳞片; 5.种子纵剖面。(刘怡涛) Fig.4 Calamus austro-guangxiensis 1. lower part of a leaf; 2. portion of a female inflorescence with fruits; 3. fruit; 4.scale; 5. seed in longitudinal section.

本变种与原种不同处在于叶鞘上的囊状凸起处无刺,果实较小,果被较短,近圆筒形, 鳞片 18 列。

Yunnan (云南): Mengla (勐腊), Yaoqu (瑶区), alt. 700—800m, 1974.11.20, Z. H. Yang (杨增宏)12406 (typus, YNTBI)。

#### 24. 桂南省藤 新种 图 4

Calamus austro-guangxiensis S. J. Pei et S. Y. Chen, sp. nov.— C. tetradactylus auct. non Hance. Wei in Guihaia 6: 33. 1986 (C. C. Chang 13268).

Species C. melanolomae Mart. affinis, sed fronde leviter longiore; segmentis leviter longioribus et latioribus, elliptico-oblanceolatis, non lanceolatis vel oblanceolatis; inflorescentia feminea bis ramificanti, non semel ramificanti; fructu ellipsoideo differt.

Caulis scandens, gracilis. Frondes pinnatisectae (ad supra medium tandum visae); rhachis ab nuctere visa, subtus unguibus solitariis reflexis leviter densioribus, in utroque latere breviter

unguibus et spinis strictis, apice et cirrhus subtus unguibus 2 vel 3 connatis vel semiverticillatis ornata; segmenta non multa saepe in pairia inserta, in quoque pairibus ad angulus 45° patensta, inferne raro solitaria, elliptico-oblanceolata, versus basin angusta, apice acuminibus setiformibus acute ornata, 14—15 cm longa, 3.5—4 cm lata, supra conspicue 5-nervis, nervulis transversa-libus leviter densioribus conspicue praedita. Inflorescentiae masculi ignoti. Inflorescentia feminea tantum superior visa, bis ramificans; spatha primaria longe tubuloso-infundibuliformis, in circumscriprione unguibus ornata; spatha secundaria longe tubuloso-infundibuliformis, in circumscriprione unguibus pauce ornata; spathilla asymmetrice infundibuliformis; involucrophorum semicupulatum extra spathillam 1—2 productum leviter axillari-callosum; involucrum prope cupulatum; flore sterili in involucro latere insertum, areola lunata praeditae. Flores femineae ignotae. Perianthium fructiferum conspicue pedicellatum; calyx vadose 3-lobatus. Fructus ovoideus vel ellipsoideus, stramineus, c. 1.8 cm longus, 1.2 cm latus, squamis longitudinaliter 15-seriatis, medio vadose et late canaliculatis, margine atrato-lineatis, erosis, sursum apice gradatim latis praeditus; seminea ellipsoidea, c. 1.5 cm longa, 1.1 cm lata, leviter complanata, supra profunde areolata; albuminibus ruminatis; embryoes prope basilares.

Guangxi (广西): Shangsi (上思), Shiwandashan (十万大山),1958.11.5, Chang (张肇骞)13268 (typus, IBG): H. Q. Li (黎焕琦) 40395。

茎攀援,细长。叶羽状全裂,只见叶的中上部;所见叶轴下面具稍密的单生下弯的爪,两侧具短爪或直刺,顶部及纤鞭的下面具 2—3 个合生或半轮生的爪;羽片不多,通常 2 片成对着生,每对羽片约叉开 45°的角,下部偶有单片羽片着生,椭圆状倒披针形,向基部变狭,顶端为急尖的具刚毛的尖头,长 14—15cm,宽 3.5—4cm,上面 5 条肋脉及横脉明显,稍密。雄花序未见。雌花序只见上部,二回分枝,一级佛焰苞长管状,周围有星散的爪;二级佛焰苞长管状漏斗形,周围有少数几个爪;小佛焰苞不对称漏斗形;总苞托半杯状,半伸出于小佛焰苞,稍具腋部胼胝体;总苞近杯状;中性花小窠半月形,侧生于总苞侧边。雌花未见。果被明显梗状;萼片浅 3 裂。果实卵形或椭圆形,草黄色,长约 1.8cm,宽约 1.2cm,鳞片 15 纵列,中央具浅而宽的沟槽,边缘具暗色线,啮蚀状,向顶端变宽;种子椭圆形,长 1.5cm,宽 1.1cm,稍扁,表面具深的洼穴,胚乳稍嚼烂状,胚近基生。

本种与 C. melanoloma Mart. 相近,但本种叶稍长,羽片亦稍长而宽,呈椭圆状倒披针形而非披针形或倒披针形;雌花序二回分枝而非一回分枝,果实呈椭圆形而不同。

## 二、钩叶藤属 Plectocomia Mart. et Bl.

#### 1. 高地钩叶藤 新拟

Plectocomia himalayana Griff. in Calc. Journ. Nat. Hist. 5:100.1845; Palm. Brit. East Ind. 108.t. 219.1850; Becc. et Hook. f. in Hook. f. Fl. Brit. Ind. 6:478.1893; Becc. in Ann. Roy.Bot. Gard.Calc. 12(3):36.t. 23. 1921. — P. montana Hook.f. et Thoms. in Hook. f. Fl. Brit. Ind. 6:478.1893; Becc. in Ann. Roy. Bot. Gard. Calc. 12(3):36.1921.

云南 (Yunnan): 勐腊 (Mengla), 南贡山 (Nangongshan), 陈三阳, 童绍全 (S. Y. Chen et S. Q. Tong) 18984; 瑶区 (Yaoqu) 考察队 34238; 沧源 (Cangyuan) 王启无 (C. W. Wang) 73243.国家重点保护植物。我国分布新记录;锡金大吉岭有分布。

## 2. 大钩叶藤 新拟

Plectocomia assamica Griff. in Calc. Journ. Nat. Hist. 5:97.1845; Palm. Brit. East Ind. 107.t. 218.1850; Becc. et Hook. f. in Hook.f. Fl. Brit. Ind. 6:479. 1893; Becc. in Ann. Roy. Bot. Gard.Calc. 12(3):38-40.t. 24.1921.

云南 (Yunnan): 勐腊 (Mengla),瑶区 (Yaoqu),陈三阳 (S. Y. Chen) 18843,陶 国达 (G. D. Tao) 9148(云南热带植物所栽培)。我国分布新记录;印度阿萨姆有分布。

## 3. 钩叶藤 (西双版纳植物名录)

Plectocomia kerrana Becc. in Ann. Roy. Bot. Gard. Calc. 12(3): 41.t. 27,28. 1921; Gagnep. in Lecomte, Fl. Gen. Indo-chine 6:1012.1937.

云南 (Yunnan): 勐腊(Mengla),瑶区(Yaoqu),陈三阳、余彩(S. Y. Chen et C.Yu) 5539、5543; 云南热带植物所栽培,陈三阳 8204、18864;麻栗坡 (Malipo) 天保,无采集人 6635。 我国分布新记录;泰国西北部有分布。

## 三、蛇皮果属 Salacca Reinw.

# 1. 滇西蛇皮果 (西双版纳植物名录)

Salacca secunda Griff. in Calc. Journ. Nat. Hist. 5:12. 1844; Palm. Brit. East Ind. 14.t. 177.1850; Becc. in Ann. Roy. Bot. Gard. Calc. 12(3):87.t.54-55.1921.——Calamus collinus Griff. Palm. Brit. East Ind. t. 186 (leaf only). 1850.

云南 (Yunnan): 盈江 (Yingjiang), 那邦坝 (Nabangba), 陶国达 (G. D. Tao) 13626, 17904, 陈三阳、陶国达 (S. Y. Chen et G. D. Tao) 18944; 芒线 (Mangxian), 裴盛基 (S. J. Pei)14162。我国分布新记录;印度阿萨姆有分布。

# 四、小蓝棕属 Wallichia Roxb.

## 1. 密花小堇棕 新拟

Wallichia densifiora Mart. Hist. Nat. Palm. 1:189. 1823; Kurz For. Fl. Brit. Burma 2:532.1877; Becc. et Hook. f. in Hook. f. Fl. Brit. Ind. 6:419.1892; McCurrach in Palm. World 262.1960.—W. oblongifolia Griff. in Calc. Journ. Nat. Hist. 5:486.1845; T. Anders. in Journ. Linn. Soc. 11:6. 1871.—Harina oblongifolia Griff. Palm. Brit. East Ind. 175.t. 237A, B, C. 1850.

云南 (Yunnan): 盈江 (Yingjiang), 那邦坝 (Nabangba), 陈三阳,陶国达 (S. Y. Chen et G. D. Tao) 18949。我国分布新记录;印度阿萨姆,孟加拉吉大港有分布。

#### 2. 二列小堇棕 新拟

Wallichia disticha T. Anders. in Journ. Linn. Soc. 11:6. 1871; Becc. et Hook. f. in Hook.f.Fl. Brit. Ind. 6:419. 1892; McCurrach in Palm. World 260. 1960. — W. yomae Kurz in For. Fl. Brit. Burma 2:533.1877.

云南 (Yunnan): 盈江 (Yingjiang), 那邦坝 (Nabangba), 陶 国 达 (G. D. Tao) 13272, 17886, 陈三阳,陶国达 (S. Y. Chen et G. D. Tao) 18946.

我国分布新记录;锡金,缅甸有分布。